THE TARHEEL WASHOFF

START THE NEW YEAR RIGHT

COOPERATE !

RESOLVE! REBUILD! RETAIN!

SOIL EROSION SERVICE

UNITED STATES DEPARTMENT OF THE INTERIOR
NORTH CAROLINA AREA

Circular No. 6

HIGH POINT, NORTH CAROLINA
January 15, 1935

DR. STALLINGS MESSAGE

To The Reader:

IN ORDER THAT the Soil Erosion Service may concentrate upon the establishment of the Reedy Fork soil erosion project, it will be necessary to withdraw a number of men now working in the Deep River area. Such a move will necessarily greatly retard the progress of the erosion-control work in this area. There is, in fact, liklihood that field work in the Deep River area may be discontinued entirely at an early date.

WE THEREFORE EXTEND an invitation to the remaining farmers in the Deep River area who have not signed an agreement to cooperate with the government in helping to control erosion on their farms to do so as soon as possible. Should the reader be in the group of those who have not signed a cooperative agreement, we request that you get in touch with us at the offices of the Soil Erosion Service in High Point and discuss your problems with us.

WE AVAIL OURSELVES of this opportunity to express our appreciation to the eight hundred farmers in this area who have already signed cooperative agreements, and to the four hundred additional farmers who have signified their intentions of doing so by extending us invitations to cooperate with them. We urge those who have not yet signed up to follow the example of those who have and reap the results thereof.

Dr. J. H. Stallings
Regional Director
Soil Erosion Service

DID YOU KNOW THAT ....

WHEN THE SLOPE of land is increased 4 times, the speed of the water flowing over it is about double, the cutting power is multiplied by 4, the power to carry soil is multiplied by 32 and the size of particles it can carry is multiplied by 64?

EROSION REMOVES twenty-one times as much plant food from the soil as cultivated crops?

EROSION COSTS the State of North Carolina 66 million dollars yearly by removing plant food alone?

ROTATING CROPS reduce soil loss about one-third?

BURNED-OVER WOODS lose over 38 times as much soil as does unburned woods?

GRASS SOD LOSES over 11 times as much soil as unburned woods?

MORE THAN 50% of the cultivated land in the Piedmont Region is severely eroded and gullied?

7.1% OF ALL LAND in Piedmont North Carolina has been abandoned due to excessive erosion?

3.1% OF ALL THE LAND in North Carolina has been abandoned due to erosion?

THE SECOND MOST BADLY eroded soil in North Carolina is one of the predominant soils in the Deep River erosion control area?

TERRACES BUILT by the Soil Erosion Service in this area recently withstood the heaviest 36-hour rain on record in the last ten years?

CORRECT CONTOUR-FURROWING

UNLESS PROPER EROSION-CONTROL methods are applied in due time, gullied hillsides which have been abandoned for pasture will inevitably become hopelessly untillable. Among the various methods and practices which the Soil Erosion Service applies in its fight to control erosion and in salvaging badly gullied areas, none is more applicable nor more necessary than contour furrowing.

CONTOUR FURROWING, as the name indicates, means the throwing up of furrows following the contours of the land. If the field is badly cut up with gullies from six to eight inches in depth, or deeper, it is best to close the furrows at the edge of the gullies. But if the field has only shallow depressions the furrows may cut across those depressions, providing the base of the furrow is kept level. To keep the base of the furrow level it must curve up the gullies or depression and down the crests of the hills between, thus making a CORRECT CONTOUR line upon the field.

THE FUNDAMENTAL PURPOSE of contour furrowing is to stop the washing of the soil and to irrigate the land. The contour furrow accomplishes this aim in several different ways. By having a level base the furrow will not allow the water to wash down the hillside, but will hold it and distribute it regularly over the field. The water is thus given time to soak into the soil.

BY TAKING THE WATER out of the gullies, leaving them dry -- except for the water that falls there-- grass and other erosion-resisting plants are given chance to grow. As time goes on that land will again become tillable and productive.

NOW WHEN THE FARMER has more spare time than any other season of the year contour furrowing should be done, so that the furrows will have time to settle between now and Spring. Furrows that are constructed now will serve as the centers of the LAND for the fields to be plowed in the Spring.

IT IS URGED AS AN EROSION-CONTROL and land-use measure that the farmers apply more definitely the contour-furrow upon their badly eroded fields. If anyone having such work to be done will call by the offices of the Soil Erosion Service in High Point we shall be glad to help them do it.

THE OLD LADY KNOWS BEST

A NAKED TERRACE is like a naked baby in that neither can withstand exposure to the ravages of Mother Nature. But with a little help from man in securing sufficient covering, and other necessary attributes of development, they can get a fine foothold on life.

NOTHING IS AS EFFECTIVE or as permanent in helping to "clothe" the terrace as vegetative growth. Look about your farm and you can see evidences of how Mother Nature has established vegetation and healed many gullies. Let us take a lesson from The Old Lady in our fight against erosion!

THE USE OF SHRUBS, vines, blackberry and other such close-growing plants properly placed at the outlets of terraces serve as an excellent method of preventing water from cutting gullies in the terrace channels.

THIN THE WOODS NOW

IN THE DEEP RIVER area, where the sleet storm of last winter injured so many trees, it is especially important to improve the timberland and put it in better shape for producing an income. Injured trees should be removed before they are killed by insects and diseases, and while they still have a monetary value as fuelwood, pulpwood, fence posts, crossties, and perhaps as timber.

FORESTS CAN BE FURTHER improved by the removal of trees of poor species, such as black gum, black oak, blackjack oak, red maple, sycamore, etc. Such "weed trees" should be removed if they over-top young white oak, post oak, red oak, yellow poplar, and short leaf pine. Dense stands of young reproduction should be thinned by removing undesirable forms and species.

THE FOLLOWING LIST includes other classes of trees which should be removed from our forests:

1. Those which have their growth stunted by being overtopped by others.
2. Badly fire-scarred trees.
3. Crooked trees and large-crowned, shortboled trees which are crowding others and utilizing more growing space than their value permits.

IN MANY INSTANCES where fields have been abandoned in the past five years the natural reproduction has been both sparse and often of undesirable species. In these cases farm labor can be utilized profitably by planting such areas to good, rapid growing trees at a low cost per acre. Tree seedlings can be obtained at cost (about $3.00 per 1,000, plus transportation) from the State Dept. of Conservation and Development at Raleigh.

TIMELY TIPS

THE SOIL EROSION SERVICE is cooperating with the farmers in the erosion-control area by supplying them seed for growing certain crops which will assist in controlling wash on their farms. Most of the seed will be planted in February and March. In order to get the best results from these crops, it is essential to prepare the land properly before planting time. The Soil Erosion Service, therefore, makes some suggestions on how to prepare land for these crops:

WHERE PASTURE MIXTURES ARE TO BE SOWN -- unless that land is now in small grain -- the land should be broken this winter. Land broken now will have time to pulverize and become firm before seeding. This is necessary for a good stand and quick growth of pasture grasses. Before seeding, this land should be disked and leveled.

STRIPS OF LAND which are to be seeded in alfalfa during early Spring should be broken as early as possible, and then disked every thirty days thereafter until planting time. If strip-cropping with alfalfa has been planned for your farm and the strips have not been laid out, the Soil Erosion Service will do so at an early date. To get good results from alfalfa, it is absolutely necessary to have a well-pulverized and firm seed bed at planting time.

A GREATER PART of lespedeza and clover will be sown in with small grain that is now growing. No soil preparation for such areas need be done now. All that is necessary is a section harrow run-over lightly at seeding time. In case the land that is to be sown to lespedeza is not now in grain, then the soil preparation should be the same as for pasture land.

PLANNING PLANTING

TO START THE NEW YEAR off right, it is appropriate to plan now what should be done on the farm during the ensuing year. One of the most important things to do now is to select the best varieties of the different crops to be grown upon your farm during the year. Experimentation and demonstration upon different types of soil in the Deep River erosion-control area have proved that certain varieties of each crop will produce more quantity and greater quality on our soils than others.

FOR THE AID AND CONVENIENCE of the farmers in this area the Soil Erosion Service has compiled a chart which will indicate the varieties of crops best suited for the soil in this area. After selecting the varieties which you intend to use on your farm, you should secure--if you do not have such on hand--seed that has been field-selected, sound and free from diseases.

THE USE OF BETTER seed now means the reaping of higher profits in your farm operations in the future and the development of a higher type of agriculture for this section.

BELOW ARE LISTED the varieties best adapted to the soils of the Deep River area:

CROP	VARIETIES
Tobacco	Cash
	White Stem Oronocco
	Yellow Pryor
	Jamaica
	Bonanza
Cotton	Mexican Big Boll Improved Strain (128 and 58-14)

CROP	VARIETIES
Corn	Southern Beauty Weekley's Improved Golden Jarvis (yellow)
Soy Beans	Laredo--Medium early Virginia--Early Mammoth Yellow--for bog pasture.
Cowpeas	Brabham Iron
Lespedeza	Kobe Tennessee #76 Korean (for most productive soils) Korean & Common (for pasture mixture)
Irish Potatoes	Irish Cobblers
Sweet Potatoes	Porto Ricos Nancy Hall

PROMINENT LAWYER COMMENTS

"FROM WHAT I SEE AND HEAR of it the Soil Erosion Service is the best thing that the present Washington administration has innaugerated to aid agriculture," declared Clifford Frazier, widely known Greensboro lawyer. "Such work of conserving farm soils and land-use planning is of fundamental importance. The saving of our soils from aggravated rainwash is merely safeguarding the security and prosperity of our country, which seems to me any thinking person has no difficulty in seeing."

MENACE OF FROST ACTION

THE UPWARD HEAVING frost action, which we can see any cold winter morning on road banks, gullies and other such places where the soil does not have a sufficient cover, is one of the most destructive agencies of our soil. It is not at all uncommon to find particles of the soil lifted upward by the ice six to eight inches in the early morning. Later in the day when the sun rises and the earth begins to thaw and melt the ice, those soil particles fall back upon the harder soil below. On embankments and steep hills, when the ice threads melt, the soil washes down and collects at the bottoms of the banks.

UNLESS SUCH PLACES that are susceptible to frost action are protected, they will soon lose their agricultural and scenic value. Some form of vegetative cover must be planted to protect against washing. The most permanent practical protection against this erosion menace is a mulch of woods litter which falls from trees, or a cover of grass or vines, such as blackberry and Devil's Shoe String.

WILDLIFE AND EROSION CONTROL

THE SCOPE OF THE SOIL EROSION SERVICE includes wildlife management as a phase of the proper land-use program. Planting terrace outlets, ditch banks, gullies and other badly eroded areas with suitable cover causes very little additional effort to the major operations of controlling erosion. These improvements, together with good management of fence rows, hedges and odd corners about the farm will make the entire area a veritable haven for game, song and insectivorous birds.

QUESTIONS AND ANSWERS

Ques. How should lespedeza be sown on idle land?
Ans. Disc the land with a disc harrow and seed.

Ques. What can I do with areas of land that are "wet natured"?
Ans. Run over it with a disc harrow and seed to a mixture of orchard grass, Redtop grass and lespedeza.

Ques. How is the farmer going to get seed to carry out the Soil Erosion Service program, besides that which is furnished by the Soil Erosion Service?
Ans. Harvest seed from crops grown from original seed furnished by the Soil Erosion Service.

Ques. What may the farmer do with the crops for which the Soil Erosion Service furnished seed?
Ans. The farmer may do as he pleases with such crops.

Ques. Is it advisable to follow tobacco after lespedeza?
Ans. No.

Ques. What is a good quail food?
Ans. Lespedeza.

Ques. What two hawks are harmful to quail?
Ans. Sharp-Shinned and Coopers.

Ques. What species of trees are being planted by the Soil Erosion Service?
Ans. Loblolly and shortleaf pines, and black locust. Oak and walnut seed are also being used.

DECLARES CROPPING METHODS IMPORTANT

"AS THE RESULTS OF EXPERIMENTS in soil conservation and erosion control show definitely that methods of soil management and cropping methods are very important in conserving soil and controlling run-off water, and as there has been, and is now, a tendency by certain ones to consider terracing as the most important implement of erosion control.

"BE IT RESOLVED BY THIS SOCIETY that, any National or State program of erosion control and soil conservation should include all of the methods of attack which are proven to be valuable by carefully conducted experiments. A complete program of erosion control must include vegetative methods using grass and trees, contour farming and strip cropping, and crop rotations with soil erosion resistant crops in the rotation and in strips on the contour.

"BE IT FURTHER RESOLVED that no terraces should be promoted in any soil conservation program by our National Government unless they are properly combined with sensible soil management and agronomic methods of erosion control based upon a soil classification and study that will provide the necessary knowledge regarding the several factors which must be considered for the best utilization of each field, considering soil type, slope of the land, type and extent of erosion, and the present use that is being made of the field."

--Resolution of American Society of Agronomy.